

Abstract Of The Disclosure

[00113] A vehicle control system includes a housed sensor cluster generating a plurality of signals. An integrated controller includes a sensor signal compensation unit and a kinematics unit, wherein the sensor signal compensation unit receives at least one of the plurality of signals and compensates for an offset within the signal and generates a compensated signal as a function thereof. The integrated controller further generates a kinematics signal including a sensor frame with respect to an intermediate axis system as a function of the compensated signal and generates a vehicle frame signal as a function of the kinematics signal. A dynamic system controller receives the vehicle frame signal and generates a dynamic control signal in response thereto. A safety device controller receives the dynamic control signal and further generates a safety device signal in response thereto.